

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendments, claims 1-10 are pending in the application, with 1 and 10 being the independent claims.

Applicants acknowledge and thank the Examiner for allowing claims 1-4, 8 and 9.

Claims 5, 6, and 10 have been amended. Claim 5 has been amended to delete the phrase "when the matrix requires a calcination temperature of about 400° C or lower." Claim 6 has been amended to delete the phrase "when the matrix requires a calcination temperature of about 400° C or higher." Claim 10 has been amended to more clearly describe the subject matter of the invention. Support for these amendment can be found, *inter alia*, at paragraphs [0005] and [0040] of the application as filed. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendments and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 112

Claims 5 and 6 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Specifically, the Examiner alleges that the phrase "when the matrix requires" is unclear. Applicants respectfully traverse the rejection. However, to facilitate prosecution of this application, claim 5 has been amended to delete the

phrase "when the matrix requires a calcination temperature of about 400° C or lower."
Claim 6 has been amended to delete the phrase "when the matrix requires a calcination temperature of about 400° C or higher." Applicants respectfully request that the rejections under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claim 7 was rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Specifically, the Examiner alleges that it is unclear whether the "drying step" recited in claim 7 is the same as the drying step of claim 1, step (e), or is a separate, distinct step. Applicants respectfully traverse the rejection. Applicants submit that claim 7 recites "The method of claim 1, further comprising a drying step...." [emphasis added]. The words "further comprising" in claim 7 indicate that the drying step in claim 7 is an additional and separate step from the drying step in claim 1, step (e). Applicants respectfully request that the rejection under 35 U.S.C. § 112, second paragraph, be withdrawn.

Rejections under 35 U.S.C. § 102(a), 102(b), and 103(a)

Claim 10 was rejected under 35 U.S.C. § 102(a) as allegedly being anticipated, or in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious, over China Abstract 1465729. Claim 10 was also rejected under 35 U.S.C. § 102(b) as allegedly being anticipated, or in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over Xu *et al.* (*Carbon* 37:855-858 (1999)), Flahaut *et al.* (*Acta Mater.* 48:3803-3813 (2000)), Dong *et al.* (*Mater. Sci. Eng. A313*:83-87 (2001)), Bian *et al.* (*Adv. Mater.* 15:616-621 (2003)), Bian *et al.* (*Appl. Physics Let.* 82:2790-2792 (2003)) or Chen *et al.*

(*Adv. Eng. Mater.* 5:514-518). In particular, the Examiner alleges that the above documents disclose a metal nanocomposite powder comprising carbon nanotubes dispersed in a metallic matrix, and thus appear to be physically identical (in the sense of 35 U.S.C. § 102(a)) to the products of the instant claim. Applicants respectfully traverse these rejections.

Applicants assert that the characteristic morphology of the nanocomposite powder of the present invention is distinct from the morphology of the powders described in the documents cited by the Examiner. Conventional processes of dispersing carbon nanotubes in a metal matrix such as those described in the documents cited by the Examiner, *supra*, result in agglomeration of nanotubes and do not result in homogeneous dispersion of nanotubes inside the metal matrix. The method of dispersing carbon nanotubes in the present invention results in minimal agglomeration of nanotubes and a homogeneous dispersion of carbon nanotubes inside the metal matrix. Amended claim 10 recites a "metal nanocomposite powder comprising carbon nanotubes homogeneously dispersed in a metal matrix." The cited documents do not provide nor suggest a powder as provided in claim 10. Thus, amended claim 10 is neither anticipated nor made obvious by the cited references. Upon consideration of the above, Applicants respectfully request that the rejections under 35 U.S.C. § 102(a), 102(b), and 103(a), be withdrawn.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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